

I. AMENDMENT

In the Claims:

Please cancel claims 14-15 without prejudice or disclaimer.

Please amend claims 1, 4, 8, 12, 19, 23-24, and 27 as follows:

1. (Amended) A control circuit for controlling a motor assembly having a coil and a movable arm, the control circuit comprising:
a drive circuit operable to be coupled to the coil, to receive a control signal and a speed signal, to generate a drive signal in response to the control and speed signals, and to drive the coil with the drive signal; and
a sensor circuit coupled to the drive circuit and operable to be coupled directly across the coil and to generate the speed signal having a level that corresponds to the speed of the arm.

4. (Amended) A control circuit for controlling a read-write head assembly during a park or unpark operation, the head assembly including a motor assembly having a coil and a movable arm, the head assembly also including a read-write head coupled to the arm, the control circuit comprising:
a drive circuit operable to receive a control signal and a speed signal and to drive the coil in response to the control and speed signals such that the read-write head moves to or from a ramped parking platform at a speed that is less than ten inches per second for a predetermined time period; and
a sensor circuit coupled to the drive circuit and operable to sense the speed of the read-write head and to generate the speed signal having a level that corresponds to the sensed speed of the read-write head.

8. (Amended) A control circuit for controlling a read-write head assembly that includes a motor assembly having a post, an arm having first and second ends and a midsection pivotally mounted to the post, and a coil operable to move the first end of

the arm, the read-write head assembly also including a read-write head coupled to the second end of the arm, the control circuit comprising:

a drive circuit having a control input terminal, a feedback input terminal, and a first output terminal that is operable to be coupled to a first terminal of the coil; and

a speed-sense circuit having first and second input terminals that are operable to be directly coupled to the first terminal and a second terminal of the coil and having an output terminal coupled to the feedback input terminal of the drive circuit.

12. (Amended) A disk-drive system, comprising:

a disk having a peripheral edge and a surface;

a platform disposed adjacent to the peripheral edge of the disk and raised with respect to the disk surface;

a coil;

an arm;

a read-write head coupled to the arm; and

a nondithering control circuit coupled to the coil and operable to cause the coil to park the read-write head by moving the read-write head from over the disk onto the platform at approximately a constant speed.

19. (Amended) A method, comprising:

accelerating a read-write head to approximately a predetermined speed using a head-motor coil;

directly monitoring a back voltage across the coil; and

when or after the head attains the predetermined speed, maintaining the speed of the head at approximately the predetermined speed in response to the back voltage.

23. (Amended) The method of claim 19 wherein the monitoring comprises

directly monitoring the back voltage during periods of approximately zero current flow through the coil.

24. (Amended) The method of claim 19 wherein the maintaining comprises maintaining the speed of the head at approximately the predetermined speed approximately until the head is on a parking surface of a parking platform.

27. (Amended) A method, comprising:
coupling a nondithered drive signal to a coil of a motor assembly to park a read-write head on a ramped platform;
uncoupling the drive signal from the coil to allow a current flowing through the coil to decay to approximately zero;
sampling a back voltage across the coil while the approximately zero current is flowing through the coil;
adjusting the drive signal in response to the sampled back voltage; and
coupling the adjusted drive signal to the coil, the adjusted drive signal shifting the back voltage toward or maintaining the back voltage substantially at a predetermined level.

Please add the following new claims:

30. A disk-drive system, comprising:
a disk having a peripheral edge and a surface;
a platform disposed adjacent to the peripheral edge of the disk and raised with respect to the disk surface;
a coil;
an arm;
a read-write head coupled to the arm; and
a nondithering control circuit coupled to the coil and operable to cause the coil to unpark the read-write head by moving the read-write head from the platform to a position over the disk at approximately a constant speed.